

CHALLENGES AND OPPORTUNITIES OF LABOUR FORCE IN DIGITAL INDIA

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ABSTRACT

The idea of industry has been transformed with the advent of fourth industrial revolution. The introduction of new technologies like Artificial intelligence, 3D printing, internet of things, big data, block chain etc., have given a new dimension to 'industry'. Any transformation in industry will result in the loss of conventional jobs and a creation of new ones. It leads to further transformation in requirement of new sets of skilled labourers. No doubt digitalisation will change the face value of industry and increases ease of doing business. It will result in a sustainable economy even though it creates an uncertainty and imbalance in the industry and the society temporarily. The developed countries will tackle the challenges of industry's digital incarnation by developing skills from instruction oriented to higher order thinking effectively. The developing economies like India where the future of work and the labour market in digital era needs a structural transformation of labour force to meet the challenges of digitalisation. In India the concept of 'labour' traditionally involves socialistic principles and has a human touch as per the Indian Constitutional values. The idea of complete automation of industry and infusing digital technologies in all small, micro and medium industries should respect the human rights, values and principles. Moreover, abundance of unskilled labour force on one side and shortage of highly skilled on the other is the situation prevails in India. The new transformation ensures innovative business possibilities around the world, India has to develop skilled labour force to exploit digital innovations to boost the economy for the transformation of industry without replacing machines for men.

KEYWORDS: Automation, Digital, Internet, Artificial Intelligence, Industry, Transformation & Labour Market

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INTRODUCTION

The term "industry" during the first industrial revolution in Britain transformed the whole world. The great inventions for harnessing new energies like steam, and other fuels took the world to the another stage. The economic revolution of the world had started with the "industry". The introduction of machines in the life of men created a havoc in the society. A group called Luddites¹ protested heavily in the name of industry that the machines were replacing men, it happened between 1811 and 1816. The first industrial revolution witnessed the exploitation of men and machine in equal proportion. Industry during this period begot labour, economy, profit and exploitation. The industry and industrial revolution produced not only the above but also the great economists of the period. Adam Smith, Thomas Malthus, David Ricardo, Karl Marx, Friedrich Engels narrated the journey and exploitation of industry of industry inventions and harnessing of new energies like steam, and other fuels took the world to the another stage. The economic revolution from 1750 to 1914 most of the countries of Europe and USA were transformed to industrial societies. The impact of the revolution had got both positive and negative sides. The first automation period brought development in cities. The population, production and profit increased as an immediate effect. The new aspect of trade union emerged with socialism when exploitation reached with the

¹<http://www.nationalarchives.gov.uk/education/politics/g3/>

laissez faire capitalism. With the increase of mass production and profit new modern style of life emerged during this period. At the same time the long term impact of growing inequality and environmental degradation felt badly in the world². The journey of machines in the life of humans has been continuously growing since industrialization in 18th century and reached digitalization in the 21st century. We are now in the threshold of fourth industrial revolution which transformed the whole industry and the nature of jobs to a different level called digitalization. This is also creating an insecurity amongst the masses of India. Any transformation in industry as we have seen in the history will result in the loss of traditional jobs and the creation of new ones. The digitalization process will endanger the very old jobs of dyeing, carving, painting, welding, tinkering etc., Every field of traditional work has already changed its face. The people lost the fervour of writing letters and the postal department altered a lot of usual works due to technology. Every job today and tomorrow is in need of a new skill and technology. The tectonic shift to automation and digitalization in India will have pros and cons. We have a lot of unprotected workers in informal economy without skills. This research will look into the challenges and opportunities of labour force in Digital India.

The Opportunities of Labour Force in Digital India

“Our aim is to achieve the vision of Digital India, where every Indian is digitally empowered and every information is digitally available”³.

Work today in India is venturing digitised world which is the future. The digital platform for labour includes the following technologies

- 3D printing
- 5G connectivity
- Automation
- Machine learning
- Autonomous transport
- Advanced robotics
- Robotic process through automation
- Cloud computing
- Retail marketing and e-commerce
- IT-BPM
- Internet of things
- Financial services
- Logistics
- Artificial Intelligence
- Digital communication
- Electronics manufacturing⁴

The above was categorically stated in the report of March 2019 by Mc Kinsey Global Institute on “Digital India”-

²https://www.oup.com.au/__data/assets/pdf_file/0017/58031/Oxford-Big-Ideas-Geography-History-9-ch5-Industrial-revolution.pdf

³<https://digitizeindia.gov.in/>

⁴www.mckinsey.com/mgi.

Technology to transform a connected nation. The report said that the digitised businesses of present and future provides opportunity for service tailored jobs in digital labour platform. This growth would reduce the digital gap between the healthier and the poorer states.⁵ The report also researched and said that digital platform do create millions of jobs but it requires new skills and labour restructuring in the job market. It expects 60 to 65 millions of jobs but it will be a highly skilled intensive. The digital job platform ensures

- Ease of business through high speed connectivity
- Increase in productivity through automating routine tasks
- Great data analysis for better decision making⁶

Indian government digital initiative is in full swing to double the digital platform for exploring new and different opportunities for labour force.

Digital India focusses on two types of industries the above mentioned are in the “capital intensive industries” and the other is “labour intensive industries” which mostly depends on goods and services in the above digital based industries⁷. In the “Emerging technologies and the future of work in India”⁸ –Tandem research,2018 report by ILO Decent Work Team For South Asia And Country Office For India publication- ISSN: 2227-4391 (print); 2227-4405 (web pdf). It interestingly found out micro –technology in digital platform is helping greatly for micro small and medium enterprise in ease of doing the business and also those who are in the informal economy. A few digital application in improved stove, carts, tractors sewing machines, location applications become technology ladder to boost their capability in enhancing income for their life. The digital platform provides them a lot of opportunities in learning new skills and pave way for lifelong learning skills. The aims are to transform the unskilled, low skilled and unprotected labour force in informal economy into higher order thinking skilled to enrich the labour economics. Digital India includes all flagship schemes Skill India, Make in India, Start-up India. This was analysed as follows, "India is looking at right issues and moving in the right direction. But there are major challenges down the road," by ILO director general Guy Ryder ⁹.

The Challenges of Labour Force in Digital India

Industry 4.0 itself a challenge to a country like India. The world’s biggest labour force countries are China and India. The labour participation rate in India on December 2018 is 51%¹⁰. The huge population of 1.2 billion going to 1.5 billion soon¹¹. Digital India expects everyone to face challenges as opportunities and is going to be. With low-skilled, low-income labour and high unemployment situation India has to make Digital India initiative a success. Guy Ryder, ILO, very much categorically stated the challenges of labour force

- Generating quality jobs
- Decent work

⁵<https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/digital-india-technology-to-transform-a-connected-nation>

⁶ibid.,

⁷https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/publication/wcms_631296.pdf

⁸ ibid.,

⁹https://economictimes.indiatimes.com/articleshow/53100578.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

¹⁰<https://www.ceicdata.com/en/country/india>

¹¹<https://www.pwc.in/assets/pdfs/future-of-india/future-of-india-the-winning-leap.pdf>.

- Moving towards formalization
- Extending adequate social security protection to all¹²

The other challenges for Digital India pointed out as follows

- For another 20 years' formal education needed for 7 million additional children every year
- Higher quality education and healthcare
- For health care 1,00,000 additional doctors and 3,00,000 additional nurses are needed
- Increasing life expectancy from 66 to 80 years
- Water scarcity
- Energy security¹³

The specific challenges of labour force

India is filled with youth population 65% of people are younger than 35 with the advent of digitised economy¹⁴ India's population continues to rise, expected to touch a maximum of about 1.1 billion in 2050¹⁵. The labour force has two sectors organised and unorganised. More than 90% of the population are unorganised, unprotected and low-skilled in informal economy. This is the major challenge for work force in India. The world bank report of S4YE (solutions for youth employment) "digital jobs for youth"¹⁶ prioritize the youth employment. In India there will be a chance of more youth population will remain unemployed. The another major challenge is the rapid change and advancement in technology for low skill workers and routine investment jobs. The McKinsey report mentioned above says that half of the traditional and conventional jobs will be automated by acknowledging the digital technology. The report also points out that 60% of the jobs will be automated in future. The traditional jobs will be completely transformed to new jobs The new jobs include micro work, crowd work, online digital platform jobs and freelancers in every field. The transformation. The changes in technology will result in job loss if the necessary skills of the respective of new jobs learnt. The young labour force should commit themselves to digital era and prepare for life long learning. New era needs special talents and with entrepreneurial skills. The vision and vision areas of digital India initiatives are made as a national policy. The key skills which are going to a great challenge are given in Digital India initiatives. "Digital India aims to provide the much needed thrust to the nine pillars of growth areas, namely Broadband Highways, Universal Access to Mobile Connectivity, Public Internet Access Programme, e-Governance: Reforming Government through Technology, e-Khanty - Electronic Delivery of Services, Information for All, Electronics Manufacturing, IT for Jobs and Early Harvest Programmes. Each of these areas is a complex programme in itself and cuts across multiple Ministries and Departments."¹⁷ The national policy accepted the digital era and in full swing and started implementing with full vigour. The challenges of labour force have to be addressed by the ministry for the take -off of digital India. The following are the new challenges

- New set of skills for digital jobs which are very expensive and the government has to cover in all field right from school to tertiary education

¹²ibid.,

¹³<https://www.pwc.in/assets/pdfs/future-of-india/future-of-india-the-winning-leap.pdf>

¹⁴<https://www.ceicdata.com/en/country/india>

¹⁵<http://www.in.undp.org/content/india/en/home/library/hdr/human-development-products/shaping-the-future--how-changing-demographics-can-power-human-de.html>

¹⁶<http://documents.worldbank.org/curated/en/503651536154914951/pdf/129757-S4YE-Digital-Jobs-Report.pdf>.

¹⁷<https://digitalindia.gov.in/content/programme-pillars>

- Digital skills are needed but enough infrastructure is available to everyone for learning of those skills
- Fixed time to be prescribed for quick learning of skills and has to be made mandatory
- The digital skills are mostly repetitive by machines often reduces the creative abilities
- The change of jobs and learning of skills left the labour force unattended and there will be no social security.

To eradicate the above challenges, Digital India Initiative encourages the citizens to learn enthusiastically the skills. The world skills India¹⁸ through NSDC is a new one. The Digital India programme wants every citizen, corporates, NGO and other vital players of the society to coordinate and cooperate to be successful in digital era.

CONCLUSIONS

It is true India ventured Industry 4.0 and declared the future is going to be “Digital India. “The digitised economy in India is the culmination point of Liberalization, Globalization and Privatization (LPG) economic policy of 1990’s. When India could not generate employment with organised sector a great portion of labour force had to settle with unorganised sector. The informal economy with unprotected workers started growing throughout India. Even after 1990 LPG policy which invited multi- national companies could not create sufficient jobs to satiate the labour market of India. Thus the growth after the introduction of LPG is also not significant. The huge low skilled, low income and medium income population did not help the labour force to flourish. The labour standards addressed by ILO, like social dialogue, elimination of child labour and forced labours and creating a working environment without any discrimination towards Decent work agenda, are not followed effectively due to insufficient jobs availability. The informal economy not completely eradicate child or forced labour and discrimination at work place. The alleviation of poverty remains a challenge. Now the transformation in industry again with digitalization in LPG arena. The opportunities in digital India is entirely a new concept and the challenges are the opportunities. It is the challenge for India to venture digitised economy to alleviate opportunity, educating labour force with digital skills and aim for making India ready for sustainable development to achieve UN Agenda 2030. We hope the academic debates at national and international level will help the society to transform smoothly.

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